REMARKS/ARGUMENTS

Claims 1-22 are pending in this application. Claims 1, 4, 6, 10-13, 15-17, 21, and 22 are independent. Claims 4, 6, 11, 13, 15, and 16 are amended to be written in independent form including all of the subject matter recited in the base claims from which they previously directly depended respectively.

In section 1 on page 2, the Office Action objects to the Abstract due to improper language and format. The Abstract is amended to bring the language and format into compliance. For at least this reason, it is respectfully requested that the objection to the Abstract be withdrawn.

In section 6 on page 5, the Office Action indicates that claims 4-9, 11, and 13-16 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 4, 6, 11, 13, 15, and 16 are amended to be written in independent form including all of the subject matter recited in the base claims from which they previously directly depended respectively. Claims 5, 7-9, and 14 are allowable based at least on their dependence from claims 4, 6, and 13 respectively. Therefore, it is respectfully requested that claims 4-9, 11, and 13-16 be allowed.

In section 4 on pages 3-4, the Office Action rejects claims 1-3 and 12 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shankar et al. (2004/0066781) (hereinafter "Shankar") in view of Kompella et al. (US 7,136,374 B1) (hereinafter "Kompella"). This rejection is respectfully traversed for at least the following reasons.

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Claim 1 recites, "exchanging information between the PEs <u>indicating a respective ATM</u> <u>address at each PE</u> which is associated with the VPLS" (emphasis added). Similarly, claim 12 recites, "<u>associating an ATM address with the VPLS ID</u>; <u>advertising the association</u> ... to other nodes within the ATM network; <u>determining other ATM addresses</u> within the ATM network <u>which are associated with the VPLS</u>" (emphasis added).

In contrast, Shankar discloses processing a packet in a network component based on the destination address and network identifier of the packet (Paragraph 13). Shankar does not disclose, teach, or suggest associating an ATM address at a PE with a VPLS and proactively exchanging ATM addresses (i.e. "advertising") between PEs associated with the same VPLS. Kompella fails to overcome this deficiency in Shankar.

Further, claim 1 recites, "for each pair of PEs, <u>establishing a respective virtual circuit</u> between the pair of PEs using the respective ATM address <u>of each PE as endpoints</u> of the virtual circuit" (emphasis added). Similarly, claim 12 recites, "for each such other ATM address with which the PE determines that the PE is to set up a virtual circuit, <u>setting up a virtual circuit</u> with the other ATM address" (emphasis added).

The Office Action correctly concedes that Shankar does not disclose establishing a virtual circuit between respective PEs. In order to overcome this correctly conceded deficiency in Shankar, the Office Action relies on Kompella. Applicant respectfully submits that this is inadequate for at least the following reasons.

Kompella discloses using circuit identifiers to communicate between CE and PE (Column 7 lines 1-4). Further, Kompella suggests MPLS as the transport network for

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communication between PEs (Column 7 lines 4-8). However, Kompella does not disclose, teach, or suggest establishing virtual circuits between PEs on an ATM network.

Applicant respectfully submits that claims 2-3 are allowable based at least on their dependence from claim 1 for the reasons stated above in connection with claim 1.

For at least the foregoing reasons, it is respectfully requested that the rejection of claims 1-3 and 12 as allegedly being unpatentable over Shankar in view of Kompella be withdrawn.

In section 5 on pages 4-5, the Office Action rejects claims 10 and 21 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kompella in view of Rochberger et al. (US 6,310,877 B1) (hereinafter "Rochberger"). This rejection is respectfully traversed for the following reasons.

Claim 10 recites, "generating a PNNI Topology State Element (PTSE) including a service Information Group (IG), the service IG indicating the service ID and an ATM address to be associated with the service" (emphasis added). Similarly, claim 21 recites, "instructions for generating a PNNI Topology State Element (PTSE) including a service information group (IG), the service IG indicating the service ID and an ATM address to be associated with the service" (emphasis added).

In contrast, Kompella discloses maintaining at a PE a list of VPN identifiers with associated CE device identifiers (Column 13 lines 53-57). In addition, Kompella discloses associating channel identifiers with the CE device identifiers (Column 13 lines 60-67). However, Kompella does not disclose, teach, or suggest generating a service information group indicating the service ID and an ATM address to be associated with the service. A CE device

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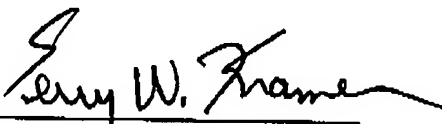Attorney's Docket No: ALC 3105

identifier is not equivalent to an ATM address. CE devices are by definition outside of the core

transport network and thus would not have ATM addresses even if the network is ATM.

Rochberger fails to overcome this deficiency in Kompella.

For at least the foregoing reasons, it is respectfully requested that the rejection of claims

10 and 21 as allegedly being unpatentable over Kompella in view of Rochberger be withdrawn.

CONCLUSION

While we believe that the instant amendment places the application in condition for

allowance, should the Examiner have any further comments or suggestions, it is respectfully

requested that the Examiner telephone the undersigned attorney in order to expeditiously resolve

any outstanding issues.

In the event that the fees submitted prove to be insufficient in connection with the filing

of this paper, please charge our Deposit Account Number 50-0578 and please credit any excess

fees to such Deposit Account.

Respectfully submitted,
KRAMER & AMADO, P.C.

Date: August 24, 2007

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APPENDIX A

A method and apparatus are provided for emulating VPLS within an ATM network. Provider Edge devices are configured for the VPLS connections. Each provider edge device advertises its configured VPLS IDs to other provider edge devices by propagating an information group up the PNNI hierarchy, the information group containing an association between an ATM address of the provider edge device and the VPLS ID. Information groups are propagated back down the PNNI hierarchy, so that each lowest level node learns all ATM addresses to be associated with each VPLS ID. For each pair of provider edge devices supporting the same VPLS ID, one of the provider edge devices establishes a virtual circuit between the pair. In this way Thus, a full mesh of virtual circuits is established between provider edge devices, and a VPLS-like service can be offered to users without having to implement MPLS. Establishing the virtual circuits within a PNNI hierarchy may be facilitated by each provider edge device propagating through the hierarchy an information group containing an association between the ATM address of the device and a VPLS ID, so that each provider edge device learns all ATM addresses to be associated with each VPLS ID. The method of advertising ATM addresses can also be applied to other services requiring a number of interconnections between provider edge devices, such as Virtual Private Networks.

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